IN THE CLAIMS

Kindly replace the claims of record with the following full set of claims:

1. (Withdrawn - Currently amended) A method of determining [[the]] pixel drive signals to be applied to [[the]] pixels of an array of light emitting display elements (2) arranged in rows and columns, with a plurality of [[the]] pixels in a row being supplied with drive current simultaneously along a ~~respective row~~ conductor associated with each of said rows (26), the method comprising:

determining target pixel drive currents corresponding to desired pixel brightness levels based on a model of [[the]] pixel current-brightness characteristics;

modifying the target pixel drive currents to take account of:

[[the]] a voltage on a corresponding ~~the respective~~ row conductor (26) at each pixel within a row resulting from the drive currents drawn ~~from the row conductor~~ by the plurality of pixels[[;]] and [[the]] a dependency of the pixel brightness characteristics on the voltage on [[the]] a corresponding row conductor at the pixel; and

determining the pixel drive signals from the modified target pixel drive currents.

2.(Withdrawn - Currently amended) The [[A]] method as claimed in claim 1, wherein each pixel is programmed in a first phase and driven in a second phase, and wherein the step of modifying the target pixel drive currents further takes account of any differences in [[the]] a drive current drawn by the pixels between the first and second phases.

3.(Withdrawn - Currently amended) The [[A]] method as claimed in claim 1 , wherein the step of modifying the target pixel drive currents comprises:

applying an algorithm to the target pixel drive currents which represents the relationship between the currents drawn by the pixels in a row and the voltages on the row conductor at the locations of the pixels; and scaling the

resulting values of said algorithm using a value representing the dependency of the pixel brightness characteristics on the voltage on the row conductor.

4.(Withdrawn - Currently amended) The [[A]] method as claimed in claim 3, wherein applying an algorithm comprises multiplying a vector of the target pixel drive currents for a row of pixels by the inversion of ~~the~~ matrix **M**, in which:

$$\mathbf{M} = \begin{bmatrix} -2 & 1 & & & \\ 1 & -2 & 1 & & \\ & \ddots & \ddots & \ddots & \\ & & 1 & -2 & 1 \\ & & & 1 & -2 \end{bmatrix},$$

and wherein [[the]] a number of rows and columns of matrix **M** is equal to the number of pixels in [[the]] a corresponding row.

5. (Withdrawn - Currently amended) The [[A]] method as claimed in claim 3, wherein each pixel comprises:

a current source circuit (22,24) which converts an input voltage to a current using a drive transistor (22), and

wherein the scaling comprises using a value including terms derived from:

[[the]] a voltage-current characteristics of the drive transistor (22); and [[the]] a voltage-current characteristics of the light emitting display element (2).

6. (Withdrawn - Currently amended) The [[A]] method as claimed in claim 5, wherein the scaling comprises using a value further including a term derived from [[the]] a resistance (R) of the row conductor.

7. (Withdrawn - Currently amended) The [[A]] method as claimed in claim 6, wherein the scaling comprises using a value $(1-\alpha)R\lambda/(1+\lambda/\mu)$, where

R is the resistance of the row conductor between adjacent pixels;

λ is [[the]] a slope of the drain-source current vs. a drain-source voltage curve of the drive transistor;

μ is [[the]] a slope of the current vs. voltage curve of [[the]] a display element; and

α is [[the]] a ratio of the current drawn by a pixel during a pixel programming phase to the current drawn by the pixel during a display.

8.(Withdrawn - Currently amended) The [[A]] method as claimed in claim 7, wherein the value

$(1-\alpha)R\lambda/(1+\lambda/\mu)$ used for scaling uses the slope of the drain-source current vs. drain-source voltage curve of the drive transistor and the slope of the current vs. voltage curve of the display element at the value of the first pixel drive current.

9.(Withdrawn - Currently amended) The [[A]] method as claimed in claim 4, wherein the result of multiplying a vector of the target pixel drive currents for a row of pixels by the inversion of the matrix **M** is obtained by a recursive operation

$$F(n) = F(n-1) + \sum_{j=0}^{n-1} I(j) + F(0),$$

in which:

F(n) is [[the]] a nth term of a the vector result of multiplying the vector of the target pixel drive currents for a row of pixels by the inversion of the matrix **M**, F(0) being the first term; and

I(j) is the target current for the jth pixel in a row, the first pixel being j=0.

10.(Withdrawn - Currently amended) The [[A]] method as claimed in claim 9, wherein: